AKAI SERVICE MANUAL

GX-620

GX-620

	F2	F3	F4	F5
CSA, AAL	125V 1.6A	125V 0.8A	125V 1A	125V 0.8A
U/T	250V 1.6A	250V 0.8A	250V 1A	250V 0.8A
CEE, UK	T 1A	T 500mA	T 1A	T 630mA

POWER
SW901
CSA AAL
AC 120V 60Hz
F1 125V 2A
C1 0.01/125(P)
FUSE P.C BOARD TG-5003

POWER
SW901
CEE UK
VOLTAGE SELECTOR
SW902
J901 AC INLET
C1 4700P/250VAC
C2 4700P/250(M)
T500mA
FUSE P.C BOARD TG-5003

POWER
SW901
U/T
AC 110 to 240V 50/60Hz
F1 200V AREA 250V 1A 100V AREA 250V 2A
C1 0.01/1.4K(Z)
VOLTAGE SELECTOR
VS1
FUSE P.C BOARD TG-5003

TO VU METER LAMPS
TO PRE AMP (OSC)
TO PRE AMP (AR)
TO PRE AMP (+22V)
SERVO OUTPUT
TO PRE AMP (REC FINAL MUTE)
TO PRE AMP (P B MUTE)

TR26 2SD571(K)(L)
TR1 2SD794(P)(Q)
TR14 2SA733(P)(Q)
TR15 2SC536K-NP(E)(F)
TR16 2SC536K-NP(E)(F)
TR17 2SC536K-NP(E)(F)
TR18 2SC536K-NP(E)(F)
TR2 2SC1061(B)(C)
TR3 2SC536K-NP(E)(F)
TR4 2SC536K-NP(E)(F)
TR20 to 22 2SC536K-NP(E)(F)
TR23 2SC2130(G)(H)
TR24 2SC2130(G)

IC1 M5441OP
IC2 LB1270

TIMER START
PLAY
OFF
REC
SW906

TENSION
SW903

REMOTE
J902

RL1 QT
RL2 PLAY/FF
RL4 PITCH-CON

SW905 OPERATION BLOCK
REC PAUSE PLAY STOP FF RWD

WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQU LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPARE L NE REMPLACER L CONPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECU QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT

0010401

F G H I J K

PRE AMP P.C BOARD

SERVO OUTPUT

PITCH CONTROL
AAL MODEL ONLY
VR901 1K B
P.B
REC

TAPE SPEED
5-3/4in ⟷ 7-1/2in
SW4
5-3/4in
7-1/2in

U/T # CSA,AAL # CEE,UK #
SW1 50Hz 60Hz
C51 1.5/180VAC
NO CIRCUIT CONNECTION
C51 1.5/18VAC

TR4 36K-NP(E)(F) 9.0V
TR5 2SC536K-NP (E)(F)
TR6 2SC536K-NP (E)(F)
TR7 2SC536K-NP (E)(F)
TR8 2SC536K-NP (E)(F)
TR9 2SC536K-NP (E)(F)
TR10 2SA733(P)(Q)
TR11 2SA733(P)(Q)
TR12 2SA733(P)(Q)
TR13 2SC2336B(Q)(R)

D7 WZ-120
D9 IS2473VE
D10 IS2473VE
D3 SVB10-200
D4 SVB10-200
FR1 100(K)

CAPSTAN MOTOR
M901 SCM-200
YLW RED BRN BLU

TERMINAL P.C BOARD (NE-2230)

SWITCH P.C BOARD (TG-5002B)

REEL SIZE
7in
10in

EXCEPT AAL MODEL

TR23 2SC2130(G)(H)
IC3 LB1270
RL1 QT
RL2 PLAY/FF
RL3 FAST
D45 IS2473HS

IC4 MB400
IC5 MB400
IC6 MB41B

TR25 2SC2130(G)(H)
D46 W03B

C50 0.47/250(K)
QT-1
CR1
D4 SVB10-200
PLAY/FF-1
FAST-4
QT-2
FAST-2
QT-4
FAST-3
PLAY/FF-2
PLAY/FF-4
CR2 CR3 CR4 CR5 CR6 CR7

U/T CSA AAL	CR1 to CR7	CR11 to CR12
CEE UK	C55 to C68 (K) 0.1/250	R108 to R114 (K) 0.1/250, 100

SL901 PINCH ROLLER PLUNGER
SL903 BRAKE PLUNGER
SL902 PAUSE PLUNGER

BRAKE
SW904 NO NC

REEL MOTOR
M902 24XO-TD
M903 24XO-TD
LEFT RIGHT

2SA733 2SC536K-NP
2SC2130
2SD571
2SC1061 2SC2336B
2SD794

POWER SUPPLY AND SYS CON. P.C BOARD TG-5002A

NOTE
1. UNLESS OTHERWISE SPECIFIED
2. ALL RESISTORS IN OHMS 1/4W(J)
3. ALL CAPACITORS IN μF 50WV(J)
4. ⊣⊢ MARK INDICATES NON POLAR CAPACITORS
5. POWER TRANSFORMER IS DIFFERENT ACCORDING TO AREA

MARK INDICATES ALL MODEL ONLY

AMF
UTE)

COMPONENTS FOR CONTINUED SAFETY,
OMPONENTS ONLY WITH MANUFACTURER'S

OSANTS CRITIQUES DE SURETE POUR
URITE DE L'APPAREL NE REMPLACER LES
ONNEMENT EST CRITIQUE POUR LA SECURITE
MANDEES PAR LE FABRICANT

GX-620
POWER & SYS.CON
SCHEMATIC DIAGRAM
NO. 2-1 1582038A

GX-620

PRE AMP P.C BOARD TG-5001A

NOTE

UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS, 1/4W (±)
ALL CAPACITORS IN μF, 50V (±)
(K) = LOW LEAKAGE CAPACITOR

001041E

F G H I J K

* REC MODE

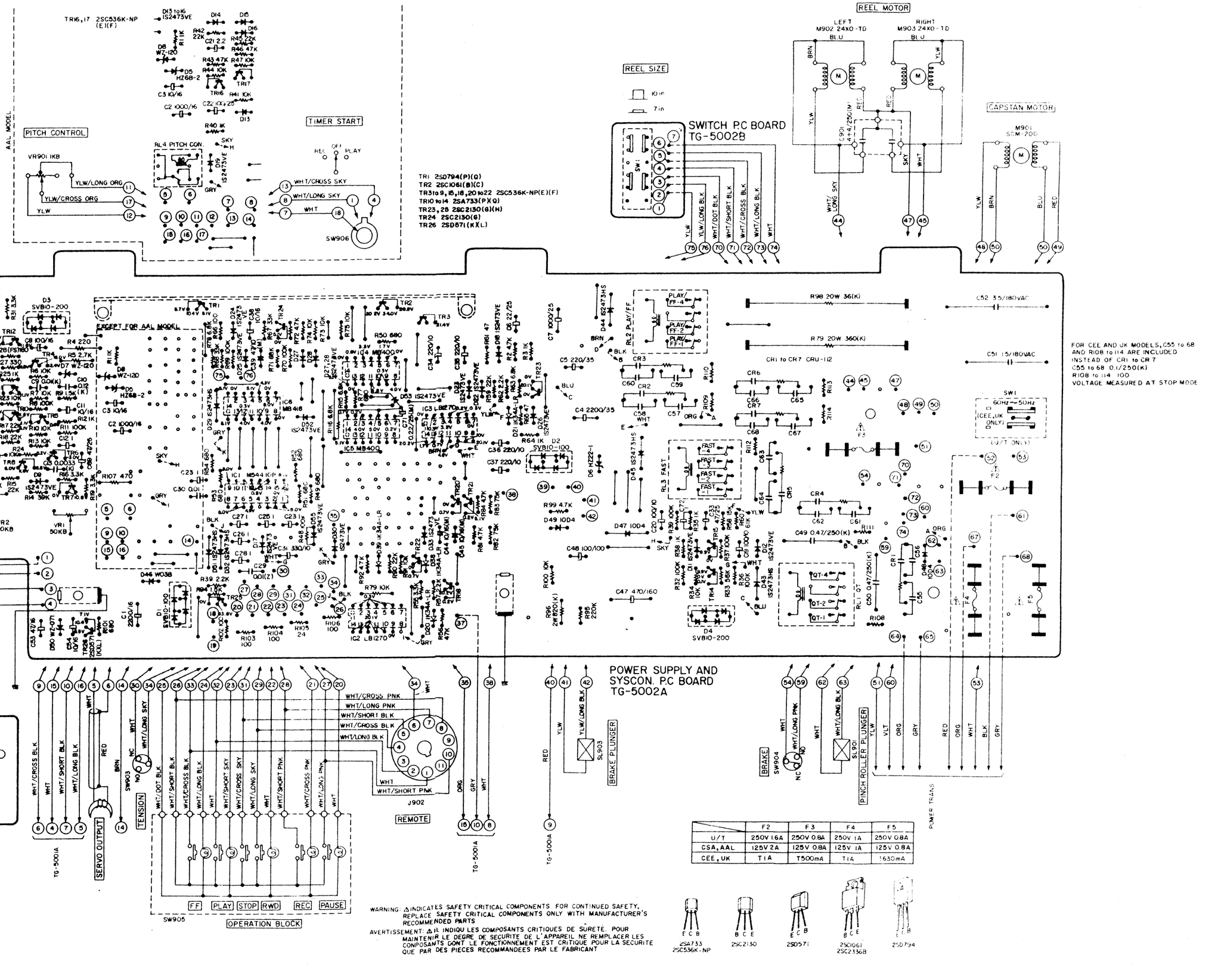
		7-1/2in	3-3/4in
TR17	B	0.2V	0.2V
	C	17.2V	14.1V
TR16	B	15.6V	12.8V
	E	15.1V	12.3V
TR6,7	E	0.4V	0.3V
T1	1 to 3	0.5V	0.6V
	4 to 6	14.5V	11.8V
	8	66.8VAC	54.3VAC
	9	111.2VAC	91.3VAC

(REC FINAL MUTE)
TO SYS CON (10)
TO SYS CON (9) (+23V)
TO SYS CON (8) (OSC)
TO SYS CON (6,5,4,7) (TAPE SPEED)
TO SYS CON (14) (AR)
TO SYS CON (15) (PB MUTE)
20.2V
D1 IS2473T-77
FREQUENCY RESPONSE
VC1 80P
R102 43K
L1 3.3mH(J)
C28 750P
C27 0.0056
C70 180P
C29 1800P/500
*T1 0T-204
C31 0.01
C32 0.01
R39 4.7K
C33 33/25
R40 10
R41 10
R38 470
C67 4.7/50
R93 100K
R92 10K
*TR15 2SD794(P)(Q)
*TR16 2SC945L(P)(Q)
R91 10K
D6 IS2473-VE
R88 47K
R89 33K
R90 47K
D7 IS2473-VE
R95 10K
R94 10K
C68 3.3/25
*TR6 2SC2002(K)
*TR7 2SC2002(K)
*TR17 2SC945L(P)(Q)
J904-1
J904-2
LEFT
RIGHT
E C B
2SC458LG
2SC945L
2SC2002
D G S
2SK68
2SD794
SW4
TAPE SPEED
3-3/4in — 7-1/2in
SW1
SW2
L2 220μH(J)
ON / OFF
LEFT
RIGHT
TRACK SELECTOR
R97 47K
TR19 2SC945L (P)(Q)
TR18 2SC945L (P)(Q)
R96 10K
R86 15K
R87 47K
SW6
TRACK IND
D1 GL-9PG2
D2 GL-9PG2
LED P.C BOARD
TG 5001B
SOURCE ~ ← TAPE
MONITOR
J2
[PHONES]
TO VU METER
TO SYS CON
ME901
D12 1K34A-LH
TR14 2SC945L(P)(Q)
R75 100
C62 1/50
C63 10/16
VR6 5K-B
D4 1K34A-LH
C64 4.7/25
R78 68K
R79 4.7K
7.9V
20.2V
7.3V
VU METER SENS
R80 33K
C59 4.7/25
R83 33K
IC1 LA4170
R76 2W 390
R84 22
C61 100/10
R85 2.2K
C65 0.01/25
C60 33/25
C58 220/25
D9 IS2473T-77
D8 IS2473T-77
R99 100K
D10 IS2473T-77
R70 2.0K
TR12 2SC945L(P)(Q)
R72 33K
R73 100
R71 220
C55 22/25
D3 IS2473T-77
D11 IS2473-VE
C56 4.7/25
R98 27K
R74 47Ω
D2 1K34A-LH
0V
0.7V
10.1V
10.2V
16.1V
8.3V
16.7V
a b c d e f g h

GX-620 AMP
SCHEMATIC DIAGRAM
NO.2-2 1582039A

COMPOSITION OF VARIOUS P.C BOARDS

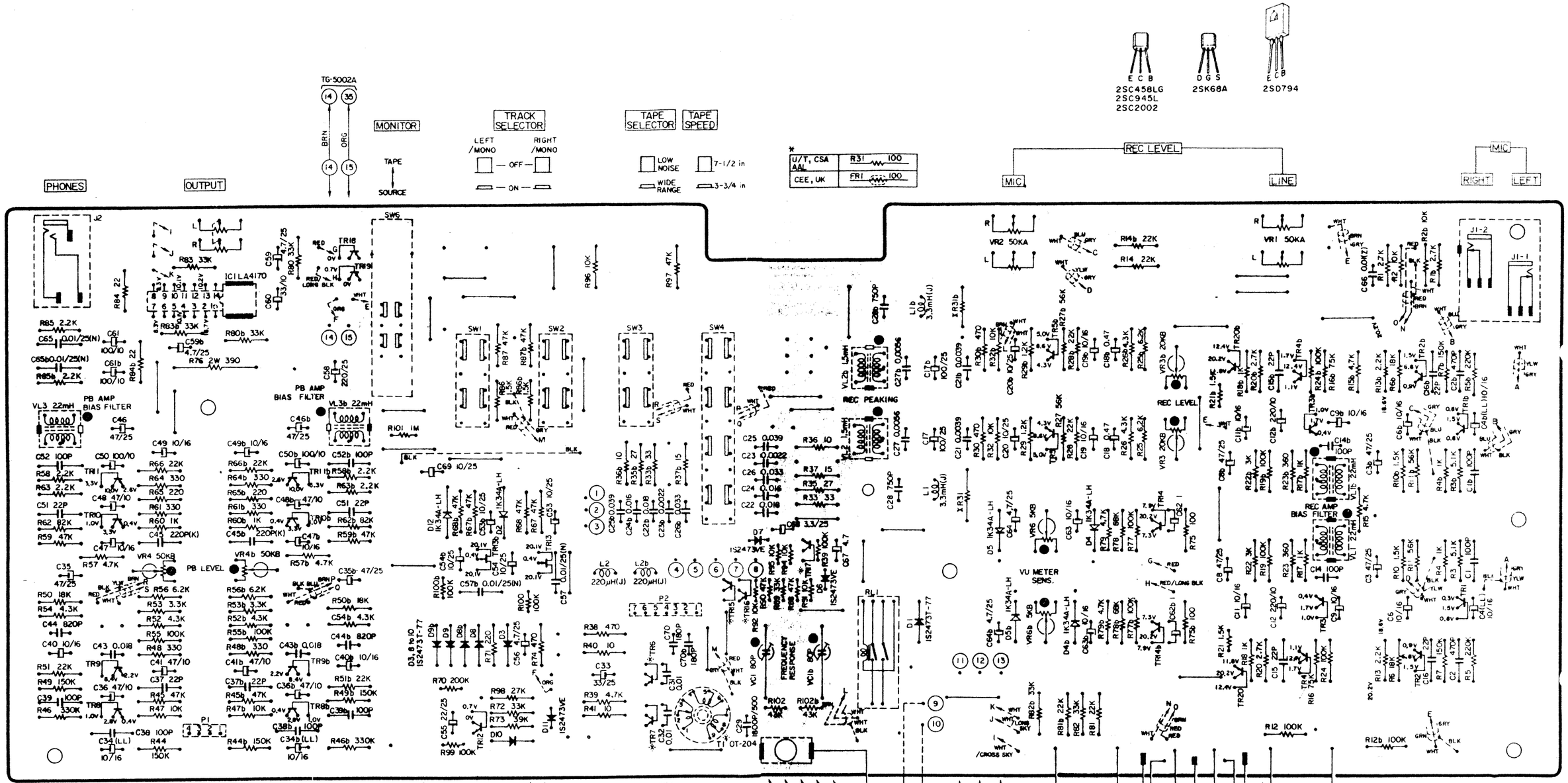
I) POWER SUPPLY & SYS. CON P.C BOARD TG-5002A, SWITCH P.C BOARD TG-5002B & TERMINAL P.C BOARD NE-2230



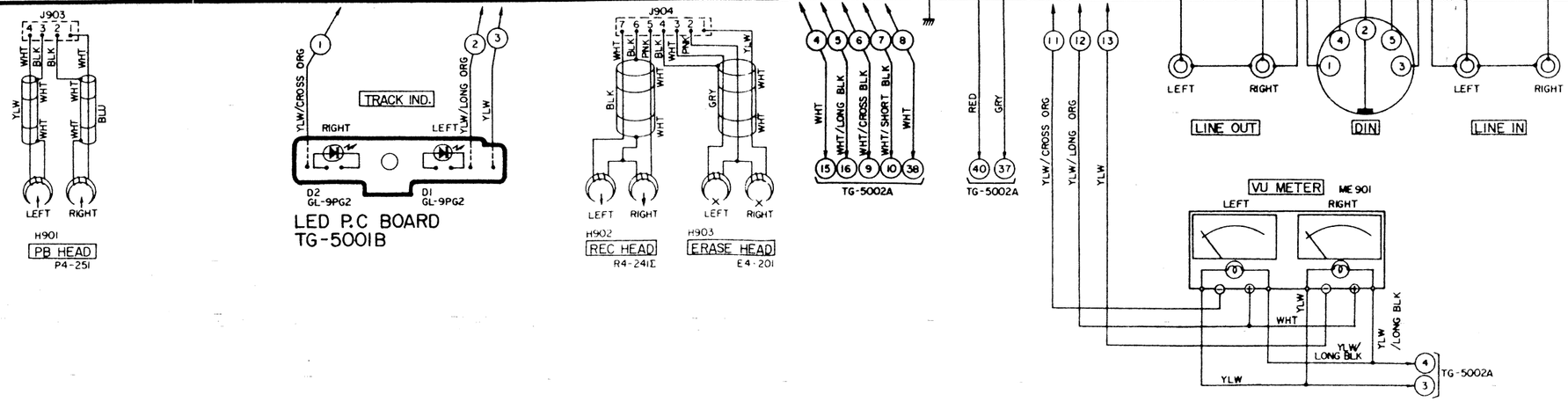
WARNING: △INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: △ IL INDIQU LES COMPOSANTS CRITIQUES DE SURETE. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL NE REMPLACER LES CONPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT

PRE AMP P.C BOARD TG-5001A (4ED) & LED P.C BOARD TG-5001B



PRE AMP P.C BOARD
TG-5001A

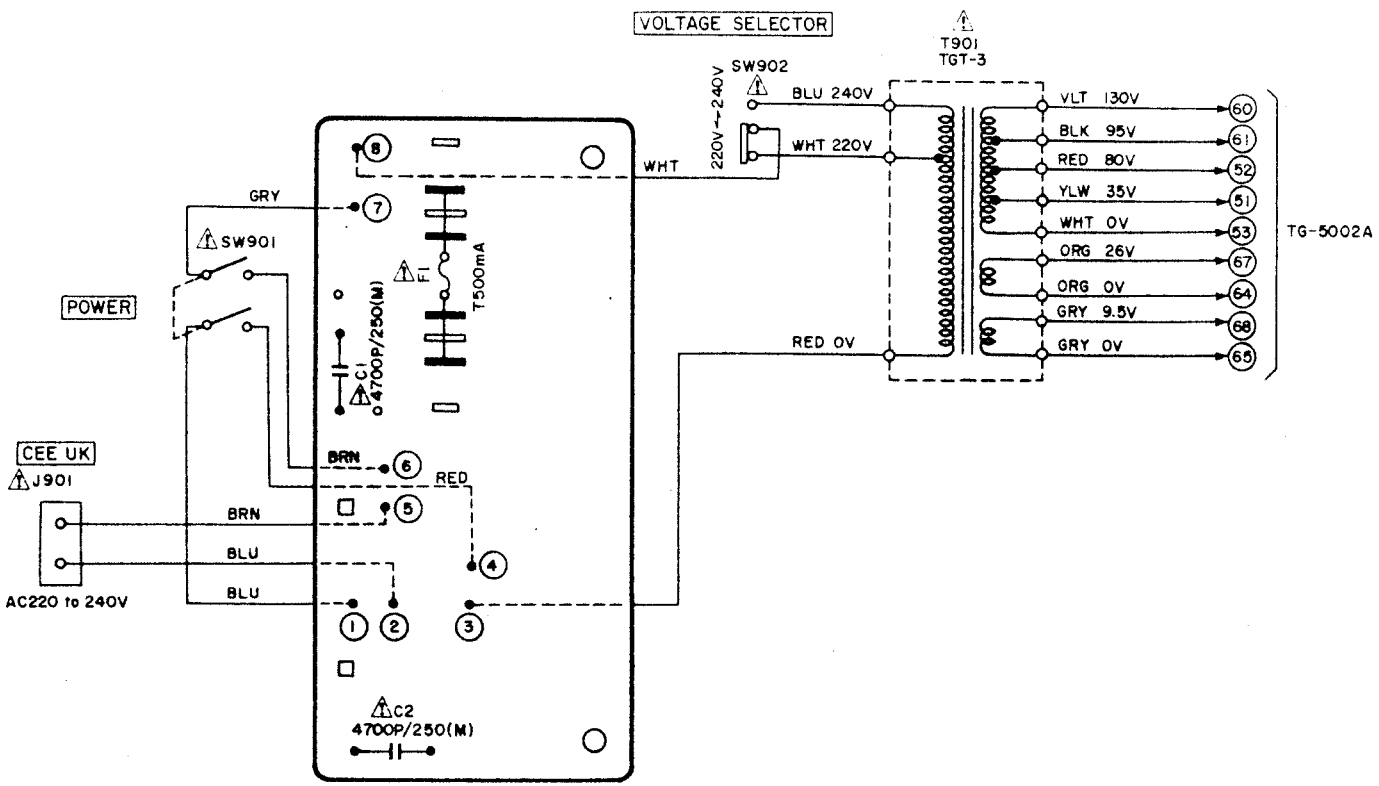


TR1 to 3, 8 to 10	2SC458LG(D)
TR4, 5, 11, 12, 14	
, 15 to 20	2SC945L(Q)(P)
TR6, 7	2SC2002(K)
TR13	2SK68A(M)
TR15	2SD794(P)(Q)

※ REC MODE

		7-1/2 in	3-3/4 in
TR17	B	0.2 V	0.2 V
	C	17.2 V	14.1 V
TR16	B	15.6 V	12.8 V
	E	15.1 V	12.3 V
TR 6	E	0.4 V	0.3 V
TR 7	E	0.4 V	0.3 V
T1	1 to 3	0.5 V	0.6 V
	4 to 6	14.5 V	11.8 V
	8	66.8 VAC	54.3 VAC
	9	111.2 VAC	91.3 VAC

FUSE P.C BOARD TG-5003 (CEE, UK)



FUSE P.C BOARD TG-5003(CEE,UK)

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